

K-1066-E UF₆ Cylinder Storage Yard

The K-1066-E cylinder storage yard is located in the western portion of the East Tennessee Technology Park, approximately 460 ft northwest of Building K-27. This yard is not fenced. The western portion is posted as a Fixed Contamination Area and TLD's required. The western section is considered a Nuclear Facility, Category 2. Postings designate the yard location, entry and notification requirements, and warn of the presence of PCBs on particular cylinders.

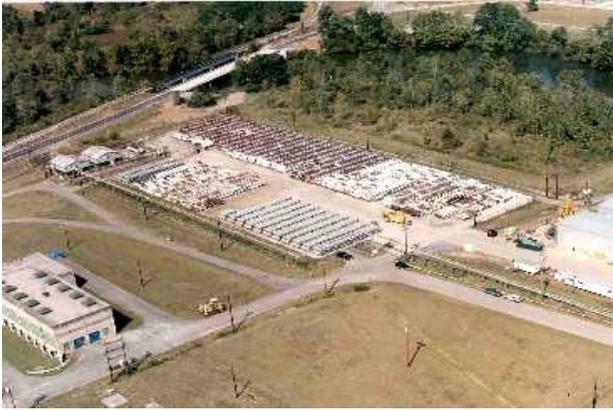
The eastern portion of the yard contains the cylinder refurbishment facility constructed and used to re-coat 400 cylinders in FY 1998. The facility consists of three 40-ft by 80-ft temporary structures, blast and paint equipment, and two support trailers located south of the structures. The three blasting and painting structures are numbered K1314-G, H, & J. The two support trailers are identified as K-1314-K (equipment storage trailer) and K-1314-L (facility control room trailer). Electrical service to the equipment and structures was added at the northwest corner of the yard. Electrical service for the support trailers is supplied from existing utility lines on the south side of the yard.

K-1066-E Yard provides a total area of 3.53 acres (~157,000 ft²). The yard consists of distinct western and eastern portions connected by a 50-by-40-ft access way that is located on the southern end of the eastern yard area. Both yard areas and the inter-connecting access are paved with concrete. The western yard was constructed in 1969 (estimated), is estimated to be 6 inches thick, and comprises 2.6 acres (~113,000 ft²) of the total yard area. The eastern yard, including the access way, was constructed in 1995, is 11 inches thick, and accounts for .93 acres (~41,000 ft²) of total yard area.

The median elevation of the western yard is 750 ft ASL. The median elevation of the eastern yard is ~753 ft ASL. Both yard portions are relatively level, sloped only for drainage. Storm water runoff from the western yard flows predominantly to the southwest, collecting in a catch basin located at the western end of the yard and discharging to Poplar Creek northwest of the yard. Runoff from the eastern yard drains to the west in an area between the western and eastern yards and flows north to discharge to Poplar Creek north of the yard. The K-1066-E yard is situated at a curve in Poplar Creek such that the creek runs along the northern side of the yard. At its closest point on the northern side, Poplar Creek is about 80 ft northeast of the eastern yard. At its closest point on the western side, the creek is about 220 ft northwest of the western yard. Site access roads run along the eastern and southern sides of the yard. Yard entry is from the access road on the southern side of the yard into either the southwest or the southeast corner of the western yard. A lighted security patrol road encircles the yard on the western, northern, and eastern sides. The security fence is located approximately 25 ft from the northern perimeter of the cylinder yard. At its closest point, the plant perimeter road is about 150 ft west of the western portion of the yard. The ORR boundary is ~2900 ft to the west.

Approximately 1550 48-inch cylinders could be properly double-stacked on the western portion of E Yard. Presently, there are 1044 improperly stacked/spaced cylinders using 1076 wooden saddles. These cylinders are stacked two high, north to south with an equipment access aisle (east to west) in the center of the yard. An additional 400 cylinders (refurbished during FY 98) are stacked with 4-ft aisles, with 60 inches center-to-center, and are on concrete saddles (400). These cylinders are also stacked two-high, north to south.

Upon the removal of the cylinder refurbishment facility on the east portion, an estimated 700 48-inch cylinders could be double-stacked on the concrete pad area.



Aerial and elevation views taken from the east side of K-1066-E.



Temporary refurbishment facilities located on the eastern section of E Yard.